

REMARKS

These remarks are in response to the Office Action dated December 22, 2011. Applicant respectfully requests a one month extension of time, and authorization is given to charge the appropriate fees to Deposit Account No. 50-0951.

At the time of the Office Action, claims 1-5 were pending in the application. Claims 1-5 were rejected under 35 U.S.C. §103(a). The rejections are discussed in more detail below.

I. Rejections based upon Art

Claims 1-5 were rejected under 35 U.S.C. §103(a) as being unpatentable over PCT Publication No. WO02/074427 to Bedetti ("Bedetti") in view of U.S. Patent No. 4,426,936 to Kuo ("Kuo") and U.S. Patent No. 3,417,975 to Williams ("Williams"). Applicant respectfully requests reconsideration of this rejection.

The subject matter of present claim 1 differs from Bedetti. For example, Bedetti does not disclose or suggest continuously dividing a fluidification air flow into a plurality of fractions having respective flow rates so that the flow rate of the fluidification air flow varies continuously between a minimum value flow rate, sufficient to support the fluid bed, fed at a first zone thereof, and a maximum value flow rate, fed in another zone of the same bed, so as to induce and maintain the substantially vortex-shaped circulatory movement of the granules.

In addition, these features are not disclosed or suggested by Kuo and/or Williams. As admitted in the Office Action, the bottom of the fluidized bed reactor of Kuo is not equipped with holes distributed in the bottom in such a way to divide the flow of fluidification air into a plurality of fractions having respective flow rates, so that the flow rate of the fluidification air flow varies continuously between a minimum value flow rate and a maximum value flow rate. To the contrary, in Kuo the plate 30 is divided in two distinct zones having different hole density: a higher hole density near the center 43 of the plate 30 and a lower hole density near the flange 45. By doing so the fluidification air flow in Kuo is merely divided in two distinct fractions corresponding to the two zones having different holes density. The above-identified claimed feature of providing a

continuous division into fractions of the fluidification air flow is not disclosed or suggested by Kuo.

Williams also clearly fails to disclose or teach such a distinguishing feature. In particular, no generation of a vortex flow is possible with the tray disclosed in Williams.

Applicant notes that Williams is related to a liquid gas contacting tray. Such a tray has nothing to do nor can it be compared or confused with a fluid bed granulation process, which is the object of the present claims. A person of ordinary skill in the art would not have considered Williams as a relevant prior art document since the latter is related to a different technical field. The skilled person also would recognize that the tray of Williams is not suitable for being used in a fluid bed granulator process and therefore would discard it.

The tray of Williams is provided with two different types of apertures. Perforations 13, 113 allow vapor to pass through the tray perpendicularly to the tray. The formed apertures 14, 114 are specifically shaped in order to make the vapor 16 passing through the apertures to flow above the tray in a direction parallel to the flat surface of the tray. The horizontal direction of the flow of vapor 16 exiting the apertures 14, 114 is absorbed by the process liquid 17 thereby causing the process liquid 17 contained on the tray 15, 115 to flow in a horizontal direction, parallel to the flat surface 10, 110 of the tray 15, 115 as indicated by the flow line 24 in Figure 2 (see for instance Williams, column 7, line 75 to column 8, line 15). This has nothing to do with the generation of a vortex. It is thus evident that these apertures 14, 114 are not conceived for nor are they suitable to generate a vortex as it must be for the holes distributed in the bottom of a fluid bed granulator.

Williams does not teach that the perforations 13, 113 are increased in density across different parts of the tray, contrary to the statement in the Office Action. The examples of Williams discuss that the material used was standard sieve material having 80 holes or perforations per square inch. There is no teaching that the perforations increase in density across the tray, from one surface towards an opposing surface, as asserted in the Office Action.

In relation to Fig. 4, which is described in col. 3, line 26 as a perspective view of a segmental section of circular flow tray, Williams teaches that the density of the formed apertures 114 increases from the center to the periphery of the tray. Thus, the density of the apertures is greater at the periphery of the tray, however, given that the perforations 113 have the same density

across the tray (or possibly an increased density in both the center and periphery of the tray), the effect of the increase in formed aperture density is reduced.

Furthermore, the teaching of Williams is the opposite of Kuo, which teaches that the density of the apertures should be greater in the center of the plate than at the periphery. If a person of ordinary skill in the art tried to modify the teaching of Kuo with that of Williams, he would not know whether to increase the density of the apertures at the center or at the periphery of a circular plate or tray. In any case, the person of ordinary skill in the art would not take from either Kuo or Williams that density should be increased from one side of a container to an opposite side of the container. Both Kuo and Williams teach a change in density from the center of a container to the peripheral edges of the container, which is contrary to the claimed arrangement. Yet further, neither Kuo nor Williams teach how to vary the flow rate of fluidification air to sustain a substantially vortex-shaped circulatory movement of the granules between a minimum flow rate sufficient to support the fluid bed, and a maximum flow rate to induce and support the vortex movement.

It follows that even supposing that a person of ordinary skill in the art combined the liquid-gas contacting tray of Williams and the perforated base taught in Kuo with the granulator of Bedetti, the skilled person would have not obtained the claimed process.

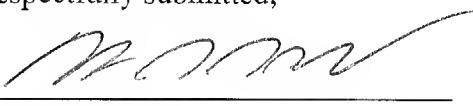
Consequently, the subject matter of present claim 1 should be considered allowable. For the foregoing reasons, claim 1 is in condition for allowance. The dependent claims are believed allowable because of their dependence upon an allowable base claim, and because of the further features recited.

II. Conclusion

Applicant has made every effort to present claims which distinguish over the prior art, and it is thus believed that all claims are in condition for allowance. Nevertheless, Applicant invites the Examiner to call the undersigned if it is believed that a telephonic interview would expedite the prosecution of the application to an allowance. In view of the foregoing remarks, Applicant respectfully requests reconsideration and prompt allowance of the pending claims.

Respectfully submitted,

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